



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Jennifer Jones, CDM Smith
Christina M Gonzalez, CDM Smith

Date: March 7, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

This memorandum summarizes the findings of biological monitoring on March 7, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:00 am and ending at 8:00 am. Weather conditions consisted of heavy rains and lightning in the early morning, with scattered rains beginning at 7am. Temperatures ranged from 50°F in the early morning and dropping to 55°F in the by 8:00 am.

Although a small crew arrived in the morning, the bulk of the work was cancelled due to rains. Work for the day was limited to reinstalling the privacy fence along both Washington and Admiralty Way which had fallen over by strong winds. The biologist left the site at 8:00 am following notification that no ground-disturbing work would be conducted due to rain. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

Table 1 provides a list of bird species observed during biological monitoring on March 7, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 7, 2016		
Common Name	Scientific Name	Comments
Western Gull	<i>Larus occidentalis</i>	Two individuals walking and wading in the Basin
Mallard	<i>Anas platyrhynchos</i>	Two individuals in the West Basin
American Coot	<i>Fulica americana</i>	Two individuals foraging throughout the Basin
Yellow-rumped Warbler	<i>Setophaga coronata</i>	One male near the construction trailer
Great Blue Heron	<i>Ardea herodias</i>	One individual in the Central Mudflat
Lesser Scaup	<i>Aythya affinis</i>	Two individuals foraging in the Basin
American Wigeon	<i>Anas Americana</i>	Nine individuals wading in the Basin



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Christina M Gonzalez, CDM Smith*

Date: March 8, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 8, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:00 am and ending at 3:30 p.m. Weather conditions were clear. Temperatures ranged from 55°F in the morning to 64°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with installing the fence posts along Admiralty Way, electrical work near the Tide Gates, cement pouring for the walking path along the bike path, and clean-up of excess cement on the walking path along Admiralty Way. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:00 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is closed and locked, and several crew members wait inside cars in the adjacent parking lot.

6:25 am. The initial biological survey begins. One black-crowned night heron and one great egret walk along the bank, and a double-crested cormorant wades near the tide gate. Two American crows are flying near the construction trailer. Two lesser scaups are in the Central Basin with three American wigeons. Three house finches are perched in the oak tree near the East Basin. Two American coots are in the East Basin along with Several American wigeons, mallards, and gadwalls. A double-crested cormorant flies into the Central Basin.

7:00 am. The biological monitor gives the bio-awareness training to the construction crew. Caution was given to the crew to be vigilant of wildlife entering work areas with the increase in numbers over the past few weeks. Emphasis was placed to be careful near the Anna's Hummingbird nest.

7:30 am. Work begins with crew members preparing the area for concrete pouring. The fence workers begin hauling posts to their work area along Admiralty Way and the electricians are near the Tide Gate.

8:00 am. A dark-eyed junco is foraging in the grass under the pines near the tide gates. A double-crested cormorant is eating a fish in the West Basin. Five lesser scaups, 12 American wigeons, five gadwalls, and two American coots are in the Central Basin. The Anna's hummingbird nest is vacant and appears to have damage from yesterday's storm. Seven lesser scaup sleep in the East Basin. There are over 50 waterfowl present in the entire Basin.

8:27 am. Four double-crested cormorants are in the East Basin.

8:37 am. An Anna's hummingbird is perched on a tree near the pump house. Two yellow-rumped warblers and a black phoebe fly back and forth between the banks of the Southeast Channel. The cement truck arrived. Plants along the south edge of the Southeast Channel seem to have been slightly damaged due to erosion from heavy rains over the last few days.

9:04 am. Two double-crested cormorants stand on the wall of the stormwater outfall. A ring-billed gull flies into the Central Basin. House sparrows can be heard in the palms along Washington. A western gull flies overhead. The gadwalls and wigeons in the Central Basin are sleeping. One killdeer is standing in the west mudflat. An Anna's hummingbird is heard nearby.

9:33 am. Two house finches are perched on the privacy fence near the construction trailer. The female carries grass in her beak.

9:50 am. A pair of mallards is sitting on the gabion peninsula then jump back into the water. A dark-eyed junco calls from the pine trees south of the Central Basin. An American crow is also perched in the same tree. There is no sign of the Anna's hummingbird in the nest tree. Two black phoebes are perched on the silt fence in the southeast channel. Workers are filling the walking path with cement.

10:08 am. Several American crows fly overhead. An Anna's hummingbird is perched on a tree near the pump house. Five double-crested cormorants are standing on the wall of the stormwater outfall. Two mallards sleep in the outlet. A ring-billed gull stands in the central mudflat among several gadwalls and wigeons.

10:58 am. A monarch butterfly is seen flying over the plants along the west bank. Two killdeer are spotted in the west mudflat. They begin to mate, with the male standing on the female. He jumps off soon after and they remain about 1 foot from each other, while the male begins grooming himself. There is no sign of a nest.

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11:14 am. There are now seven double-crested cormorants standing on the wall of the stormwater outfall. About half the population of the initial waterfowl remain. Workers begin digging a trench with an excavator along the southeast channel near Admiralty Way.

11:30 am. One of the seven double-crested cormorants jumps into the basin to forage. Two mallards wade in the shade in the south bank of the Central Basin. There is still no sign on the Anna's hummingbird near the nest.

11:47 am. A female Anna's hummingbird is calling from the pine closest to the tide gate. A great egret walks along the bank near the tide gates.

12:00 pm. The crew breaks for lunch.

12:45 pm. Work resumes. A snowy egret and a great egret are on the gabion peninsula near the tide gates

1:03 pm. A ring-billed gull is standing in the west mudflat. A mourning dove is perched on the powerlines in front of the construction trailer. The osprey with the missing tail feather flies over the Basin. A double-crested cormorant is swimming in the Central Basin. Two house finches and one house sparrow are flying among plants near the construction trailer.

1:35 pm. Approximately forty waterfowl are in the Basin. The group is made up of mostly American wigeons, but includes mallards, lesser scaups, gadwalls, two American coots and two double-crested cormorants. Crews clean up the concrete residue along the walking path near Admiralty Way.

2:30 pm. The Anna's hummingbird nest remains vacant and there has been no sign of activity all day. The osprey returns to the Basin and hovers over the Central Basin for a few minutes before diving and catching a fish. The crews begin putting up the fence along Admiralty way.

3:03 pm. Five ring-billed gulls fly overhead but do not land. Three double-crested cormorants are hunting and catching small fish in the west basin.

3:30 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey, identified by its missing tail feather, spent some of the afternoon circling the site and catching fish. The osprey would take its catch off-site to feed. This same osprey had been seen the previous week and is likely the same resident individual observed previously in the Basin.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

One monarch butterfly was observed today by the biological monitor today, along with four sightings reported by a crew member near the southeast channel. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The Anna's hummingbird nest appeared saturated with water and swollen. It is believed that the heavy winds and rains over the weekend and Monday could have resulted in nest failure, as the female hummingbird was not observed on or near the nest at all during the day's activities. The biological monitor will continue to monitor the nest daily.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. One monarch butterfly was observed today, along with four sighting by crew members. The weather conditions likely contributed to the small number of butterfly observations.
5. The biological monitor observed the Anna's hummingbird nest which appears to be damaged and vacant.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.
7. One osprey, identified by its missing tail feather, has been observed fishing in the Basin every day this week. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
8. The two killdeer that have been seen previously were observed breeding in the northwest mudflats. There is no sign of a nest. The biological monitor will continue to search the mudflat and other areas for nests.

Table 1 provides a list of bird species observed during biological monitoring on March 8, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 8, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed mating on the northwest mudflats
Osprey	<i>Pandion haliaetus</i>	1 individual observed fishing in the Basin
Western Gull	<i>Larus occidentalis</i>	Several individuals; Very common flying overhead
California Gull	<i>Larus californicus</i>	Several individuals observed flying overhead; not as common as western or ring-billed gulls
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead
Great Egret	<i>Ardea alba</i>	1-3 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	1 individuals foraging throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	2-4 individuals foraging throughout the Basin and flying overhead
Gadwall	<i>Anas strepera</i>	2-4 individuals observed flying overhead
American Wigeon	<i>Anas americana</i>	Over 12 individuals foraging and resting in the Basin
Lesser Scaup	<i>Aythya affinis</i>	Over 12 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	Up to 7 individuals observed foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Mourning Dove	<i>Zenaida macroura</i>	1 individual observed flying overhead and along the west bank
Black Phoebe	<i>Sayornis nigricans</i>	2-4 individuals perched along the south shoreline and southeast channel
Yellow-rumped Warbler	<i>Setophaga coronata</i>	Several individuals observed flying from perch to perch throughout the Basin

Dark-eyed Junco	<i>Junco hyemalis</i>	2-4 individuals observed throughout the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	2-3 individuals observed along the north bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin; one nest observed in a pine tree south of the Central Basin. The nest now appears to be inactive.

The following photographs show important biological monitoring observations:



Figure 1 – Anna's hummingbird nest vacant and slightly damaged.



Figure 2 – Soil erosion causing slight damage to plants.

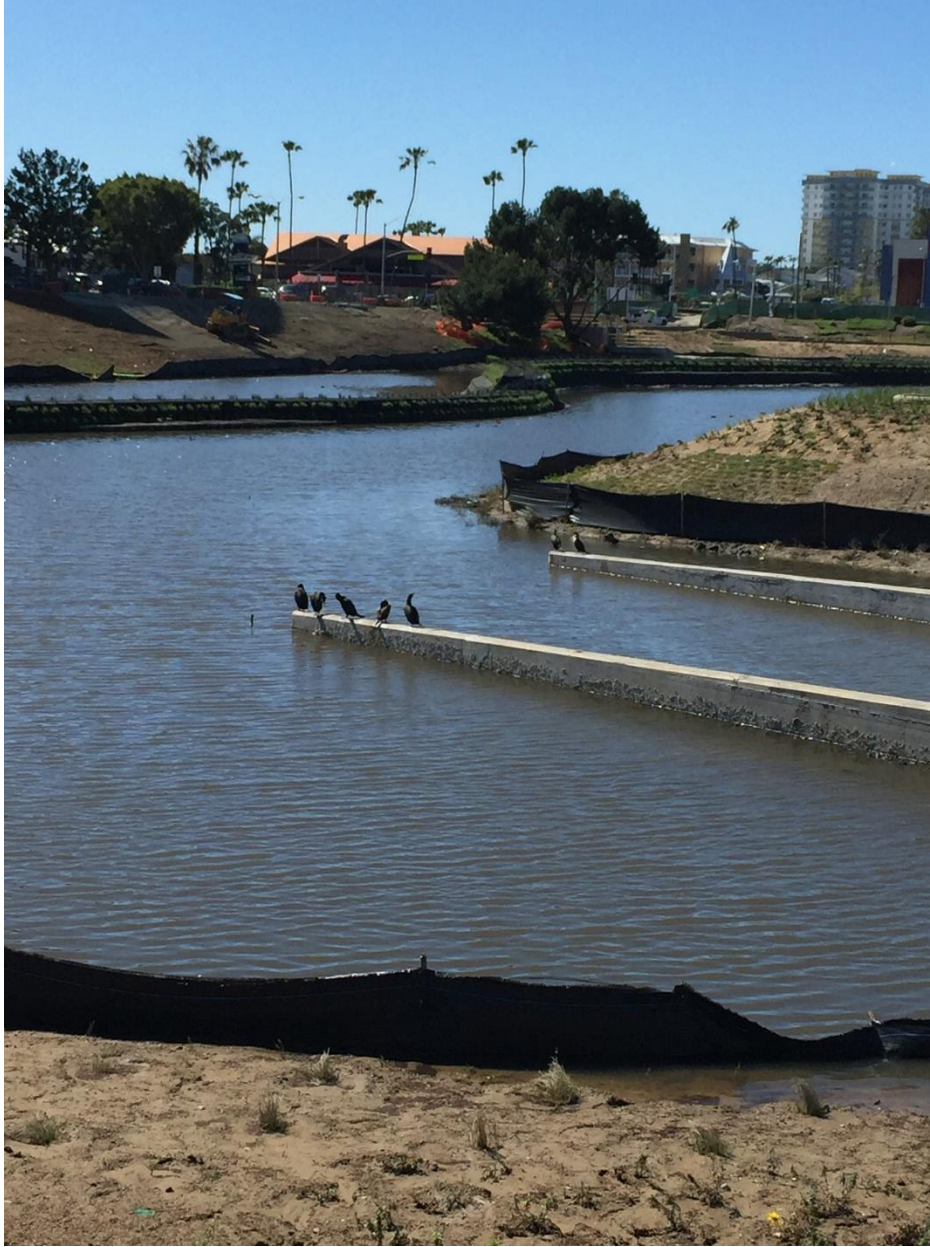


Figure 3 – Seven double-crested cormorants standing on stormwater outfall wall.



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Christina M Gonzalez, CDM Smith*

Date: March 9, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 9, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were clear. Temperatures ranged from 50°F in the morning to 66°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with digging a trench along the Admiralty walking path for the electrical conduit, planting along the south bank, compacting and filling along the southeast channel, grading of the path near the East Basin, and partial backfilling the landscape irrigation near the stormwater outfall. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members are in the construction parking lot.

6:25 am. The initial biological survey begins. Two great egrets are standing in the Central Basin; one chases the other away. A snowy egret stands on the bank near the tide gates. A house finch is heard in the pines across Washington. Two mallards and two gadwall are in the Central Basin. A great blue heron is standing on the wall of the stormwater outfall. A double-crested cormorant is drying its wings in the mud in the East Basin. An American crow stands on the northwest peninsula. An Anna's hummingbird is perched on a streetlamp sign on Washington. Six gadwall, three lesser

scaup, and two American coots are in the East Basin. A ring-billed gull and two mallards are in the southeast channel delta. Six gadwall and 16 American wigeons are in the south portion of the Central Basin. Another ring-billed gull flies into the Basin, but the other chases it off before they fly away together. An Anna's hummingbird flies near the pine at the East Basin. A yellow-rumped warbler is in the same pine. Another Anna's hummingbird calls from a tree near the pump house. Two more mallards are in the southeast channel. A black-crowned night heron is on the gabion peninsula. A second double-crested cormorant is swimming in the basin near the tide gates. Three house sparrows fly over the parking lot.

7:05 am. The biological monitor gives the bio-awareness training to the construction crew. Training focused on awareness of wildlife in the Basin, and discussion of the Anna's Hummingbird nest, which is no longer active. The crew was also reminded to be vigilant of monarchs and to clean up their litter. The possibility of a killdeer nest was also mentioned.

7:44 am. Three lesser scaups, two mallards, and a snowy egret are in the West Basin.

8:04 am. The mallards fly out of the basin heading west. The killdeer are not present on the west mudflat. Approximately five house sparrows fly over the West Basin before flying toward the Killer Café. Roughly 30 waterfowl are in the Central Basin, mostly made up of gadwall but includes lesser scaup, one double-crested cormorant, and one ring-billed gull.

8:22 am. A least sandpiper is in the mud bank of the East Basin. Three gadwall sleep on the concrete of the stormwater outfall. A worker begins digging the trench around the irrigation near the stormwater outfall. Filling and compacting of the soil for the walking path with a roller continues, as well as the planting on the south bank.

8:40 am. An osprey flies into the Basin and catches a fish. It sits on top of the transformer near the West Basin to eat. An American crow repeatedly flies around the feeding osprey.

8:53 am. Three osprey circle over the basin, one with the missing tail feather. Two tree swallows fly north over the East Basin. All three fly west away from the Basin.

9:00 am. A snowy egret and a great egret stand together on the gabion peninsula.

9:41 am. An osprey is perched in the pine nearest the tide gates. Workers continue to dig a trench near the central pines for electrical wiring. The osprey flies in and out of the tree over the Basin. A pair of mallards swim near the tide gates.

10:03 am. A least sandpiper flies into the East Basin's shallow waters. The snowy egret walks across the East Basin. About half of the waterfowl remain, mostly wigeons and the lesser scaup. The Anna's hummingbird nest is still vacant.

10:10 am. The osprey dives in for a fish again. Workers begin compacting the soil for the Admiralty walking path.

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10:21 am. A great blue heron flies up on the gabion peninsula. Crews install irrigation along the bike path. The landscaper moves staged plants from under the east pine. Digging and general clean up occur on the bike path walk way.

10:30 am. A house sparrow is seen in a palm on Washington. A ring-billed gull circles the Basin in search of a landing spot.

10:49 am. As the osprey was eating a fresh kill on a post by the trailer, a second one flies over the Basin but gets chased off. A new plant delivery arrives and several crew members work to unload the truck.

11:24 am. The great blue heron is on the gabion peninsula and a great egret is near the tide gates. Four lesser scaup are asleep in the West Basin. A black phoebe flies over the Central Basin.

11:33 am. Several wigeons and gadwall are joined by American coots in the Central Basin. A ring-billed gull and a snowy egret stand in the East Basin.

11:45 am. Crew breaks for lunch.

12:45 pm. Work resumes.

1:00 pm. Two killdeer are standing in the west mudflat. Crews begin grading on the path above the East Basin.

1:26 pm. Approximately 42 waterfowl are in the Central Basin comprised mostly of wigeons and lesser scaup, but includes two American coots, four gadwall, and two mallards. Workers repair the silt fence at the East Basin bank.

1:56 am. A monarch butterfly flies over the north end of the southeast channel. A snowy egret flies into the southeast channel.

2:30 pm. Workers adjust irrigation lines on the northwest peninsula. An Anna's hummingbird is perched on the sign on the light post. The killdeer have moved to the opposite side of the west mudflat and are foraging. An American crow collects some twigs/fibers in the west mudflat and flies into a palm across Washington. A second crow does the same just moments later, scaring the killdeer which call out and move away. The second crow flies off with material into the same palm. Both crows come back and the killdeer move to the other side of the peninsula.

3:09 pm. A great blue heron is joined by two mallards on the gabion peninsula. A great egret remains on the peninsula as well. Another pair of mallards swim in the West Basin. Another great blue heron is on the south side of the gabion peninsula.

3:20 pm. An Anna's hummingbird is perched on the pine closest to the tide gates. A Townsend's warbler is in the same tree.

3:30 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey, identified by its missing tail feather, spent some of the afternoon circling the site and catching fish. The osprey would take its catch to higher spots to feed (light post, transformer), possibly staying close to establish the area as its territory as other osprey were seen in the basin today. This same osprey had been seen the previous week and is likely the same resident individual observed previously in the Basin.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

One monarch butterfly was observed by the biological monitor today. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The Anna's hummingbird nest remained vacant.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a dramatic decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. One monarch butterfly was observed today.
5. The Anna's hummingbird nest appears to be inactive.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.
7. One osprey, identified by its missing tail feather, has been observed fishing in the Basin every day this week. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.

8. There is no sign of a killdeer nest. The pair were observed foraging on the West Basin mudflat.

Table 1 provides a list of bird species observed during biological monitoring on March 9, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 9, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	2 individuals observed on the northwest mudflats
Osprey	<i>Pandion haliaetus</i>	3 individuals observed fishing in the Basin
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Great Egret	<i>Ardea alba</i>	1-3 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	2 individuals foraging throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	2-4 individuals foraging throughout the Basin and flying overhead
Gadwall	<i>Anas strepera</i>	4-6 individuals observed flying overhead
American Wigeon	<i>Anas americana</i>	Over 12 individuals foraging and resting in the Basin
Lesser Scaup	<i>Aythya affinis</i>	Over 12 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	2 individuals foraging throughout the Basin
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	2-3 individuals observed foraging in the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
Black Phoebe	<i>Sayornis nigricans</i>	2-4 individuals flying overhead
Townsend's Warbler	<i>Setophaga townsendi</i>	One individual perched in the pine near the tide gate
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	2-3 individuals observed along the

		north bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
Least Sandpiper	<i>Calidris minutilla</i>	One individual in the mudflats

The following photographs show important biological monitoring observations:



Figure 1 – Planting along the south bank facing east.



Figure 2 – Planting along the south bank facing west.



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

*From: Jennifer Jones, CDM Smith
Christina M Gonzalez, CDM Smith*

Date: March 10, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 10, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 3:30 p.m. Weather conditions were clear in the morning, with clouds rolling in in the afternoon. Temperatures ranged from 53°F in the morning to 65°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with digging a trench along the Admiralty walking path for the electrical conduit, compacting and filling along the southeast channel, grading of the path near the East Basin, and partial backfilling the landscape irrigation near the stormwater outfall, the installation of decking on the overlook near the tide gate, and electrical work near the tide gates. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members are in the construction parking lot.

6:25 am. The initial biological survey begins. A pair of mallards are on the gabion peninsula. Another male mallard approaches but is chased off. A European starling is perched on top of a palm on Washington. A snowy egret is in the stormwater outfall. Approximately ten lesser scaup, six gadwall, two American coots, and over twenty American wigeons are in the East Basin. An Allen's

hummingbird is in the pine near the East Basin. Two Anna's hummingbirds fly over the southeast channel. A decayed carcass of an unidentified bird is found buried under the new soil laid at the slope near the Admiralty Way walking path. A great egret is standing at the base of the stormwater outfall. A black-crowned night heron is on the peninsula near the tide gates. A ring-billed gull is in the west mudflat.

7:05 am. The biological monitor gives the bio-awareness training to the construction crew. Training focused on awareness of wildlife in the Basin and the possibility of a killdeer nest in the west mudflat. They were also reminded to be careful for monarchs and to pick up their litter around the Basin.

7:44 am. A great egret is standing on the gabion peninsula.

8:04 am. One killdeer is seen in the central mudflat. Several gadwall and wigeons are asleep in the Basin. About eight lesser scaup are feeding in the water. Around thirteen waterfowl are asleep or grooming on the central mudflat. An Anna's hummingbird calls from the sign on the light post on Washington. The second killdeer is found about 15 feet away from the other among the waterfowl on the shore. A group of workers begin landscaping on the northwest peninsula. Another worker cleans out the trash screen at the stormwater outfall. Another works on the irrigation line nearby. Trenching begins nearby for the lateral irrigation line and electrical work begins along the walking path near the bike path.

8:27 am. An Anna's hummingbird is perched on a tree by the pump house. Another Anna's hummingbird hovers over the southeast channel.

8:45 am. The great egret moves near the southeast channel. The snowy egret stands on the bank of the northeast peninsula. A belted kingfisher flies over the Basin and perches on the powerlines over the stormwater outfall. One lesser scaup is diving for fish in the southern portion of the Central Basin. Two dark-eyed juncos perch on the well near the tide gates.

9:05 am. A monarch butterfly is feeding on the plants in the central marsh mix. Most of the waterfowl are out of the Central Basin and in the mudflat.

9:19 am. Both killdeer move to the gabion peninsula.

9:30 am. An osprey flies into the Basin and catches a fish. As it heads towards the residential towers on Admiralty Way, it is chased by a crow.

9:37 am. A monarch butterfly is in the marsh mix near the northeast peninsula. The two American coots swim into the stormwater outfall. The osprey flies over the Basin with two fish in its talons.

9:51 am. Two mourning doves fly into the corner of the central mudflat near the northeast peninsula. A least sandpiper is foraging in the central mudflat.

10:25 am. Planting continues on the southern slope. The osprey catches another fish from the

Basin. It collects its meal and heads toward the towers.

10:34 am. A house sparrow perches on the privacy fence near the construction trailer. A ring-billed gull is standing in the west mudflat.

11:04 am. A monarch butterfly flies along the south bank and then crosses over the Central Basin out of view. Very few waterfowl are swimming in the Basin: two American coots, and a few lesser scaup. Nineteen waterfowl sleep on the bank of the central mudflat. A dark-eyed junco is heard calling from the trees across Admiralty. The path and screen at the boat ramp have been cleaned off.

11:25 am. A yellow Sulphur butterfly flies east along the bike path and over the southeast channel. A snowy egret eat a fish near the stormwater outfall. Three ring-billed gulls come near for scraps, but the egret successfully defends its kill.

11:42 am. A monarch butterfly is spotted flying through the staged plants near the West Basin.

11:55 am. A California brown pelican swims in the southern portion of the Central Basin and flies towards the marina about five minutes later. One killdeer is seen in the west mudflat.

12:00 am. Crew breaks for lunch.

12:45 pm. Work resumes.

12:55 pm. The osprey is in the Basin and catches another fish. Eleven lesser scaup swim in the Central Basin. A great egret remains on the gabion peninsula near the tide gates. Four gadwall forage near the bank of the central mudflat. Several house finches call from the palms and rooftops on Washington. Two gadwall sleep on the wall of the stormwater outfall while two pair wade nearby. The two American coots groom themselves on the mud of the northeast peninsula. A ring-billed gull is also perched on the wall. Five wigeons swim in the East Basin. Soil is moved from the stockpiles in the parking lot to the north end of the Basin.

1:26 pm. An Anna's hummingbird is perched on a tree by the pump house.

1:32 pm. The osprey with the missing tail feather returns to the Basin, catches another meal and heads towards the towers. It is likely this is the same osprey seen earlier in the day, but this was the first confirmed identification of the bird with the missing tail feather. The snowy egret flies into the southern portion of the Central Basin. Two mallards and three lesser scaup wade near the tide gates. A black-crowned night heron stands on the bottom half of the gabion peninsula.

2:13 pm. Two crows search for nesting materials in the west mudflat.

2:28 pm. Most waterfowl have moved from the central mudflat to wade in the East Basin. An Anna's Hummingbird perches on an oak tree in the Central Basin. A CA brown pelican flies into the East Basin, then flies to the bank of the central mudflat to dry off before flying toward the marina. There are a total of 43 ducks, including 17 American wigeons, 15 lesser scaup and several gadwall.

2:56 pm. A great blue heron flies into the basin and lands on the gabion peninsula. It flies toward the West Basin and stands along the bank.

3:07 pm. The osprey returns and quickly finds its next meal before flying toward the marina.

3:20 pm. A yellow-rumped warbler is perched on a branch on the staged plants on the west side of the Basin.

3:30 pm. The biological monitor and all crew members leave the site for the day.

Additional Observations

One osprey, identified by its missing tail feather, spent some of the afternoon circling the site and catching fish. The osprey would take its catch off site, often flying toward the towers on Admiralty. This same osprey had been seen the previous week and is likely the same resident individual observed previously in the Basin.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

A California brown pelican, a California fully protected species, was observed briefly visiting the Basin on two occasions today.

Four monarch butterflies and one yellow sulphur butterfly were observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The Anna's hummingbird nest remained vacant.

A dead bird was found in a stockpile near the southeast channel. The bird appeared to have been an old carcass that was previously seen by workers. None of the crew were aware of any contact with a bird during construction activities. The crew was asked to notify the monitor if the crew sees any dead wildlife.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.

2. In general, wildlife is most active in the morning with a decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. Four monarch butterflies and one yellow sulphur butterfly were observed today.
5. The Anna's hummingbird nest is inactive.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.
7. One osprey, identified by its missing tail feather, has been observed fishing in the Basin every day this week. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
8. There is no sign of a killdeer nest. The pair remain on the West Basin mudflat.

Table 1 provides a list of bird species observed during biological monitoring on March 10, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 10, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the northwest mudflats
Osprey	<i>Pandion haliaetus</i>	Three individuals observed fishing in the Basin
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Great Egret	<i>Ardea alba</i>	1-3 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	Two individuals foraging throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	2-4 individuals foraging throughout the Basin and flying overhead
Gadwall	<i>Anas strepera</i>	4-6 individuals observed flying overhead
American Wigeon	<i>Anas americana</i>	Over 12 individuals foraging and

		resting in the Basin
Lesser Scaup	<i>Aythya affinis</i>	Over 12 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	Two individuals foraging throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	2-3 individuals observed along the north bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
Least Sandpiper	<i>Calidris minutilla</i>	One individual in the mudflats
European Starling	<i>Sturnus vulgaris</i>	One individual calling from a palm tree on Washington
California Brown Pelican	<i>Pelecanus occidentalis</i>	1-2 individuals flying into the Basin
Yellow-rumped Warbler	<i>Setophaga coronate</i>	One individual in the staged plans on the west side of the Basin
Allen's Hummingbird	<i>Selasphorus sasin</i>	One individual near the east pine
Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals calling from trees across Admiralty
Mourning Dove	<i>Zenaida macroura</i>	Two individuals in the central mudflat



Memorandum

To: Rick Sun, Los Angeles County Department of Public Works

From: Jennifer Jones, CDM Smith
Christina M Gonzalez, CDM Smith

Date: March 11, 2016

Subject: Final Daily Biological Monitoring for the Oxford Retention Basin Multiuse Enhancement Project

Introduction

This memorandum summarizes the findings of biological monitoring on March 11, 2016, for the Oxford Retention Basin Multiuse Enhancement project. Information regarding the regulatory drivers and methodology of daily biological monitoring can be found in the Biological Monitoring – Introduction and Methods for Phase 2 Construction Memo, dated June 23, 2015.

Biological monitoring was conducted by Christina M Gonzalez, CDM Smith biologist, beginning at 6:15 am and ending at 2:00 p.m. Weather conditions were clear in the morning, with clouds rolling in in the afternoon. Temperatures ranged from 47°F in the morning to 61°F in the afternoon. Overnight, there was no measureable rain.

During the daily monitoring, the biologist observed activities associated with compacting and filling along the southeast channel, grading of the path near the East Basin, planting along the northern slope of the East Basin, the installation of the fencing on the parapet wall, the cleaning and hauling of the stockpiles in the parking lot, and setting the scaffolding for the walking path along Admiralty Way. All crews were overseen by the Contractor Superintendent and the Inspector of Record.

The following sections provide the biologist's field-log notes, with observations of the day's activities and wildlife presence and behavior.

Biologist's Field Log

6:15 am. Biological monitor arrives on site to conduct initial assessment. The construction trailer gate is open and several crew members are in the construction parking lot.

6:25 am. The initial biological survey begins. A snowy egret flies over the Basin toward the southeast channel. Dark-eyed juncos, house finches, and house sparrows are heard in the trees along Washington. Eight American wigeons and two gadwall are in the Central Basin. The egret is at the mouth of the outfall with a pair of mallards. Ten lesser scaup and six more wigeons are in the East Basin. One American coot is in the East Basin. An Anna's hummingbird flies into the pine near

the East Basin, a yellow-rumped warbler is in the same tree. Two mallards are at the mouth of the southeast channel. An American crow calls out from the eucalyptus near the boat ramp. An Anna's hummingbird hovers over the mallards. A ring-billed gull is standing on the bank of the central mudflat. An American crow forages through the plants on the south bank. Two more mallards are in the southern portion of the West Basin. Several gulls fly north a Western gull flies south.

7:05 am. The biological monitor gives the bio-awareness training to the construction crew. Training focuses on awareness of wildlife in the Basin, the abundance of hummingbirds, and the possibility of a killdeer nest in the west mudflat. The crew are also reminded to be careful for monarchs and to pick up their litter around the Basin.

7:10 am. Work begins. Fencing is being installed along the west wall, electrical work is done near the tide gates, landscapers water the plants on the southern slope. A crew cleans up the stockpiles in the parking lot. Landscapers begin planting on the northwest peninsula. Another crew prepares the scaffolding for the curbs on the Admiralty walking path.

7:53 am. A snowy egret is perched on the wall of the tide gate. A double-crested cormorant is diving in the south portion of the West Basin. An Anna's hummingbird is in the pines near the tide gates and flies out toward the Killer Café.

8:07 am. Most waterfowl are clustered in the Central Basin. Crews continue to install terra-mesh and fill the grade on the lower slope by the Admiralty Way walking path along the southeast channel. An Anna's hummingbird is perched on a tree by the pump house. A yellow-rumped warbler is flying between branches on the eucalyptus nearby. Another Anna's hummingbird hovers over the southeast channel before flying out of sight.

8:24 am. A great egret stands on the wall of the stormwater outfall. Two mallard sleep on the opposite wall. Two European starlings fly into a palm along Washington.

8:36 am. The pair of killdeer are standing on the bank of the west mudflat.

9:08 am. The double-crested cormorant stands on the bank of the central mudflat with the majority of the waterfowl. The entrance to the ground squirrel by the tide gates has spiderwebs covering it, indicating vacancy. An Anna's hummingbird flies by the pine near the tide gates. The great egret is standing on the gabion peninsula. Two house sparrows fly over the Basin toward the towers on Admiralty.

9:24 am. A monarch butterfly flies over the southeast channel toward the towers. Electrical work on the walking path for the lighted bollards is in progress.

9:31 am. A great blue heron flies into the Basin and lands on the stormwater outfall.

9:38 am. A second snowy egret flies into the Basin but is quickly chased off by the one who was at the tide gates. The great blue heron moved to the gabion peninsula.

10:50 am. An osprey flies into the Basin to catch a fish and then heads past the Hilton hotel.

11:08 am. An osprey flies over the Basin in search for food but the one with the missing tail feather chased it behind the towers. The osprey with the missing tail feather returns and perches on the pine near the tide gate.

11:23 am. The waterfowl have moved into the East Basin. A crow is in the eucalyptus tree by the bike path gathering twigs.

11:43 am. An Anna's hummingbird flies near the east pine.

11:57 am. An Anna's hummingbird is perched on the sign on the light post on Washington.

12:00 am. Crew breaks for lunch.

12:45 pm. Work resumes. A yellow-rumped warbler, a house finch, and a house sparrow are perched in the bushes near the construction trailer. A snowy egret flies into the basin and lands on the gabion peninsula. The two killdeer move into the east corner of the west mudflat. The male mounts the female, and the female quickly walks away.

12:58 pm. A light sprinkle begins to fall. Two gadwall and two lesser scaup are in the Central Basin. The two American coots wade near the stormwater outfall. A bufflehead, 14 lesser scaup, 6 gadwall, and 29 wigeons are in the East Basin. The electricians leave for the day. Planting continues on the northern slope, and crews near the boat ramp begin to reinstall the privacy fence.

1:12 pm. A monarch butterfly flies over the trees by the bike path. An Anna's hummingbird is perched on a tree next to the pump house.

1:20 pm. The light sprinkling stops.

1:25 pm. The sprinkling continues again. A two-man crew begins picking up the trash that was removed two days prior from the trash screen at the boat ramp. The sprinkle turns into heavy rain moments later, and workers begin preparing to stop for the day. Two great blue heron are perched on the gabion peninsula.

1:40 pm. One great blue heron remains on the gabion peninsula. The great egret and snowy egret stand on the catwalk of the tide gate.

2:00 pm. The gates are closed and the crew leave for the day.

Additional Observations

Two individual osprey were observed today. One was quickly chased off site by the resident osprey with the missing tail feather.

No Black Skimmers or California Least Terns were observed today. No savannah sparrows, and therefore no potential Belding's savannah sparrows, were observed.

Two monarch butterflies were observed today by the biological monitor. No butterflies or other wildlife were harmed during construction. Construction crews were reminded to be on the lookout for any monarchs that fly into active work areas.

The Anna's hummingbird nest remained vacant.

Planting occurred on the northern slope of the East Basin.

Work was halted in the afternoon due to rain.

Conclusions

Based on observations made during monitoring, the following conclusions were made:

1. Biological awareness training emphasizes caution to avoid harm to birds and wildlife in and around the Basin during construction activities. In general, wildlife tends to slowly move away from an area when crews approach to conduct work activities. They return to the area once the crews move on. The crew was reminded to dispose of trash properly.
2. In general, wildlife is most active in the morning with a decrease in observed wildlife activity after 10:00 am, with the exception of American crows and gulls. Wildlife activity often increases slightly in the late afternoon.
3. No construction activities occurred in the water.
4. Two monarch butterflies were observed today.
5. The biological monitor observed the Anna's hummingbird nest is inactive.
6. The number of fish surfacing and caught by osprey and wading birds confirm that fish are entering the Basin through the tide gates.
7. One osprey, identified by its missing tail feather, has been observed fishing in the Basin every day this week. The time spent in the Basin and its aggressive behavior toward other osprey trying to fish in the Basin suggest this osprey is a resident and considers the Basin its territory.
8. There is no sign of a killdeer nest. The pair continue to frequent the West Basin mudflat.

Table 1 provides a list of bird species observed during biological monitoring on March 11, 2016.

Table 1. Bird Species Observed during Biological Monitoring on March 11, 2016		
Common Name	Scientific Name	Comments
American Crow	<i>Corvus brachyrhynchos</i>	Several individuals; Very common flying overhead, perching on power line poles, and exploring the basin banks
Killdeer	<i>Charadrius vociferus</i>	Two individuals observed on the northwest mudflats
Osprey	<i>Pandion haliaetus</i>	Two individuals observed fishing in the Basin
Ring-billed Gull	<i>Larus delawarensis</i>	Several individuals; Common flying overhead and standing in near the mudflats
Western Gull	<i>Larus occidentalis</i>	One individual flying overhead
Great Egret	<i>Ardea alba</i>	1-2 individuals foraging throughout the Basin
Snowy Egret	<i>Egretta thula</i>	1-2 individuals foraging throughout the Basin
Great Blue Heron	<i>Ardea herodias</i>	Two individuals foraging throughout the Basin
Mallard	<i>Anas platyrhynchos</i>	2-4 individuals foraging throughout the Basin and flying overhead
Gadwall	<i>Anas strepera</i>	4-6 individuals observed flying overhead
American Wigeon	<i>Anas americana</i>	Over 12 individuals foraging and resting in the Basin
Lesser Scaup	<i>Aythya affinis</i>	Over 12 individuals foraging and resting in the Basin
American Coot	<i>Fulica americana</i>	Two individuals foraging throughout the Basin
Rock Pigeon	<i>Columba livia</i>	Very common; observed flying overhead and on structures to the south and west of the Basin
House Finch	<i>Carpodacus mexicanus</i>	Several individuals; common in palms along Washington Boulevard
House Sparrow	<i>Passer domesticus</i>	2-3 individuals observed along the north bank
Anna's Hummingbird	<i>Calypte anna</i>	4-6 individuals observed hovering overhead or perching throughout the Basin
European Starling	<i>Sturnus vulgaris</i>	Two individuals calling from a palm tree on Washington

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Yellow-rumped Warbler	<i>Setophaga coronate</i>	One individual in the staged plants on the west side of the Basin
Dark-eyed Junco	<i>Junco hyemalis</i>	Several individuals calling from trees across Admiralty
Bufflehead	<i>Bucephala albeola</i>	One individual wading in the Basin

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The following are photos taken from today's planning activities:



Planting on the top of the northern slope facing east.

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Planting on the top of the northern slope facing west.

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Planting on the northwest peninsula.